

The Morning Email: TERM TEDS & Dirty TEDS

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Want something added? Let me know: jgoulding@ghco.com

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Treasury Futures and Cash				
	Last Decimal	Last 32	Last Yield*	MDuration
ZT	108.3750	108.1200	1.012	1.935
ZF	116.4125	116.1320	1.906	1.906
ZN	120.7031	120.2250	2.527	6.001
2y	99.7188	99.2300	1.012	1.945
5y	99.4125	99.1320	1.998	4.716
10y	97.8125	97.2600	3.004	8.596

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAH09	98.6450	1.355	5	0.0130	MAR	
EDAM09	98.5650	1.435	96	0.2623	JUN	White Pack
EDAU09	98.4950	1.505	187	0.5117	SEP	
EDAZ09	98.3300	1.670	278	0.7610	DEC	
EDAH10	98.2550	1.745	369	1.0103	MAR	
EDAM10	98.0800	1.920	460	1.2596	JUN	Red Pack
EDAU10	97.8950	2.105	551	1.5089	SEP	
EDAZ10	97.6750	2.325	642	1.7582	DEC	
EDAH11	97.4950	2.505	733	2.0075	MAR	
EDAM11	97.2700	2.730	824	2.2569	JUN	Green Pack
EDAU11	97.0600	2.940	922	2.5254	SEP	
EDAZ11	96.8500	3.150	1,013	2.7747	DEC	
EDAH12	96.7250	3.275	1,104	3.0240	MAR	
EDAM12	96.6100	3.390	1,195	3.2733	JUN	Blue Pack
EDAU12	96.5200	3.480	1,286	3.5226	SEP	
EDAZ12	96.4100	3.590	1,377	3.7719	DEC	
EDAH13	96.3600	3.640	1,468	4.0212	MAR	
EDAM13	96.2850	3.715	1,559	4.2706	JUN	Gold Pack
EDZU13	96.2250	3.775	1,650	4.5199	SEP	
EDZZ13	96.1300	3.870	1,741	4.7692	DEC	

	Last Yield	Net Yield	Last Price	
White Pack	1.518	2.937	9850.88	
Red Pack	2.062	0.875	9797.63	Pack Prices
Green Pack	2.891	-1.250	9716.88	
Blue Pack	3.512	-2.750	9656.63	
Gold Pack	3.838	-1.500	9625.00	

Red pack is a 2yr proxy
 Gold pack is a 10yr proxy
 Red /Gold is a 2/10 proxy
 Blue pack is a 5yr proxy
 Blue/Gold is a 5/10 proxy

Notes

* Futures use CTD for Last Yield

IF : '#VALUE!', then, no quote being provided by exchange.

If color of cell is orange, it's simply a 'note' for me.

How many ways can you hedge the TED? Let me count...there's lots and lots, like:

- 1 Regression
 - 2 Engineered
 - 3 Strip with and without Stubs
 - 4 Convexity Bias
 - 5 Weighted
 - 6 Unweighted
- and more...

Most of us are interested in the *unweighted hedge* which is simply a curve trade hedge. There are so many ways to hedge the TED trade that I can't possibly list them all.

If you email me and ask for a specific hedge, I'll get it to you.

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Correlations (Important)

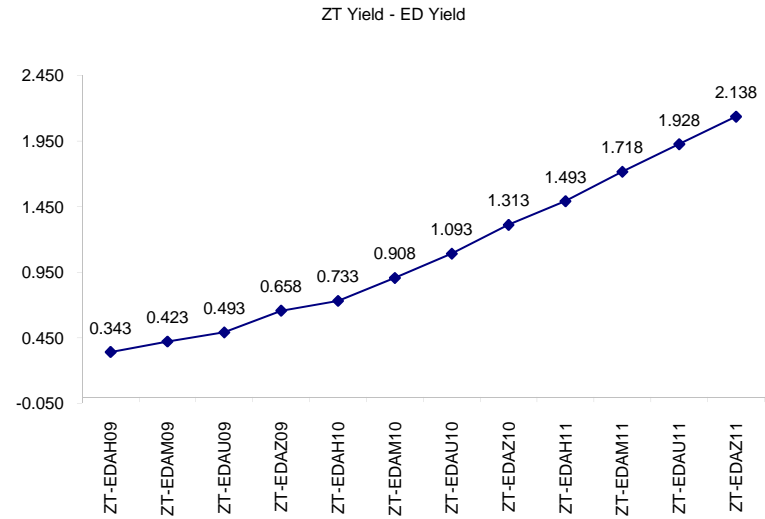
Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days. So, it's much easier to formulate the correlations based on yield than price.

ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	9.73	0.343	ZT-EDAH09	-17
EDAM09	9.81	0.423	ZT-EDAM09	-8
EDAU09	9.88	0.493	ZT-EDAU09	11
EDAZ09	10.05	0.658	ZT-EDAZ09	32
EDAH10	10.12	0.733	ZT-EDAH10	62
EDAM10	10.30	0.908	ZT-EDAM10	80
EDAU10	10.48	1.093	ZT-EDAU10	91
EDAZ10	10.70	1.313	ZT-EDAZ10	94
EDAH11	10.88	1.493	ZT-EDAH11	93
EDAM11	11.11	1.718	ZT-EDAM11	92
EDAU11	11.32	1.928	ZT-EDAU11	89
EDAZ11	11.53	2.138	ZT-EDAZ11	84

Price = Outright Decimal Price - Euro Contract Price

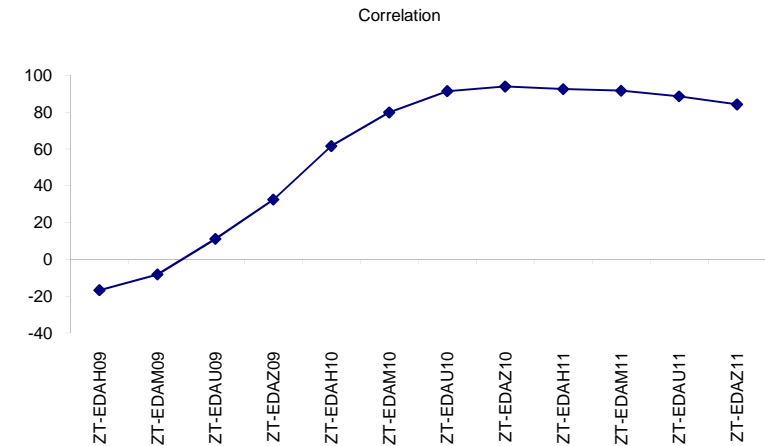
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				ZT Duration	Spread Duration	
EDAH09	0.0130	1.9354	1.9224	ZT-EDAH09		
EDAM09	0.2623	1.9354	1.6731	ZT-EDAM09		
EDAU09	0.5117	1.9354	1.4238	ZT-EDAU09		
EDAZ09	0.7610	1.9354	1.1744	ZT-EDAZ09		
EDAH10	1.0103	1.9354	0.9251	ZT-EDAH10		
EDAM10	1.2596	1.9354	0.6758	ZT-EDAM10		
EDAU10	1.5089	1.9354	0.4265	ZT-EDAU10		
EDAZ10	1.7582	1.9354	0.1772	ZT-EDAZ10		
EDAH11	2.0075	1.9354	-0.0721	ZT-EDAH11		
EDAM11	2.2569	1.9354	-0.3215	ZT-EDAM11		
EDAU11	2.5254	1.9354	-0.5899	ZT-EDAU11		
EDAZ11	2.7747	1.9354	-0.8393	ZT-EDAZ11		

The farther away from 0 the spread duration is the riskier the trade.

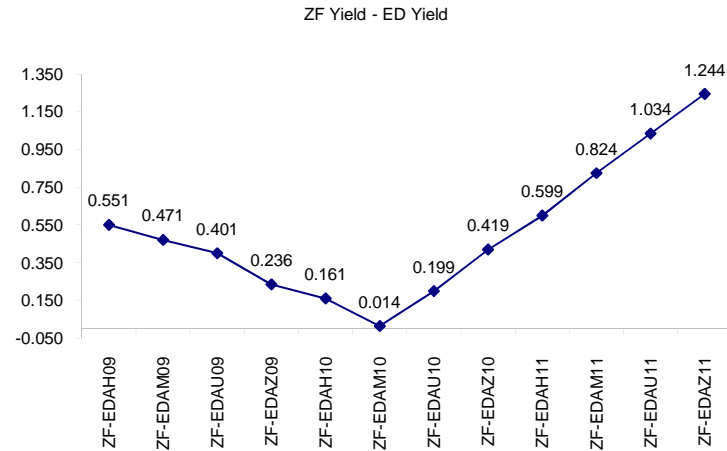


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	17.77	0.551	ZF-EDAH09	4
EDAM09	17.85	0.471	ZF-EDAM09	15
EDAU09	17.92	0.401	ZF-EDAU09	35
EDAZ09	18.08	0.236	ZF-EDAZ09	55
EDAH10	18.16	0.161	ZF-EDAH10	79
EDAM10	18.33	0.014	ZF-EDAM10	91
EDAU10	18.52	0.199	ZF-EDAU10	94
EDAZ10	18.74	0.419	ZF-EDAZ10	91
EDAH11	18.92	0.599	ZF-EDAH11	87
EDAM11	19.14	0.824	ZF-EDAM11	87
EDAU11	19.35	1.034	ZF-EDAU11	84
EDAZ11	19.56	1.244	ZF-EDAZ11	80

Price = Outright Decimal Price - Euro Contract Price

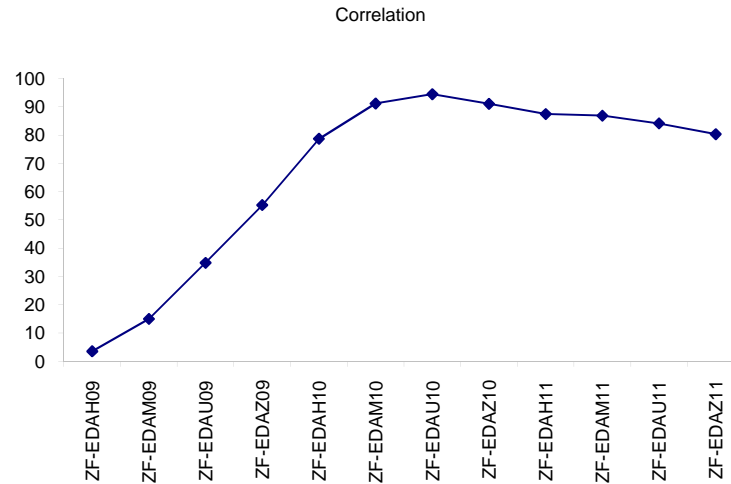
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



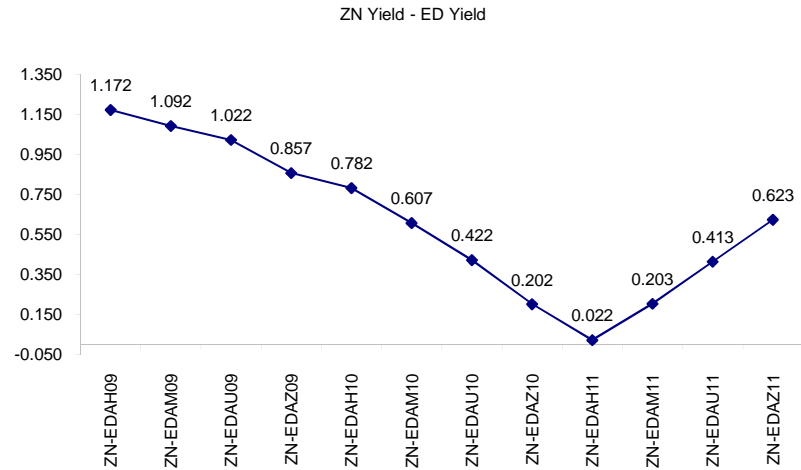
	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAH09	0.0130	1.9055	1.8925	ZF-EDAH09	
EDAM09	0.2623	1.9055	1.6432	ZF-EDAM09	
EDAU09	0.5117	1.9055	1.3938	ZF-EDAU09	
EDAZ09	0.7610	1.9055	1.1445	ZF-EDAZ09	
EDAH10	1.0103	1.9055	0.8952	ZF-EDAH10	
EDAM10	1.2596	1.9055	0.6459	ZF-EDAM10	
EDAU10	1.5089	1.9055	0.3966	ZF-EDAU10	
EDAZ10	1.7582	1.9055	0.1473	ZF-EDAZ10	
EDAH11	2.0075	1.9055	-0.1020	ZF-EDAH11	
EDAM11	2.2569	1.9055	-0.3514	ZF-EDAM11	
EDAU11	2.5254	1.9055	-0.6199	ZF-EDAU11	
EDAZ11	2.7747	1.9055	-0.8692	ZF-EDAZ11	

The farther away from 0 the spread duration is the riskier the trade.



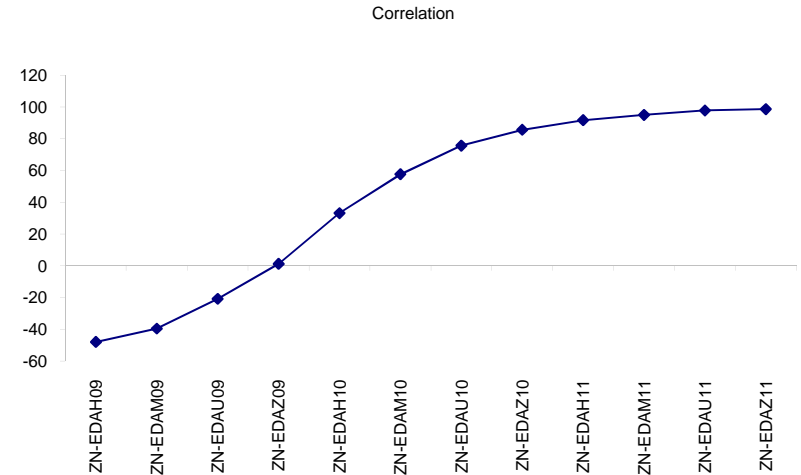
ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	22.06	1.172	ZN-EDAH09	-48
EDAM09	22.14	1.092	ZN-EDAM09	-40
EDAU09	22.21	1.022	ZN-EDAU09	-21
EDAZ09	22.37	0.857	ZN-EDAZ09	1
EDAH10	22.45	0.782	ZN-EDAH10	33
EDAM10	22.62	0.607	ZN-EDAM10	58
EDAU10	22.81	0.422	ZN-EDAU10	76
EDAZ10	23.03	0.202	ZN-EDAZ10	86
EDAH11	23.21	0.022	ZN-EDAH11	92
EDAM11	23.43	0.203	ZN-EDAM11	95
EDAU11	23.64	0.413	ZN-EDAU11	98
EDAZ11	23.85	0.623	ZN-EDAZ11	99

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS (Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year			
	Fraction of year	ZN Duration	Spread Duration
EDAH09	0.0130	6.0005	5.9875
EDAM09	0.2623	6.0005	5.7382
EDAU09	0.5117	6.0005	5.4888
EDAZ09	0.7610	6.0005	5.2395
EDAH10	1.0103	6.0005	4.9902
EDAM10	1.2596	6.0005	4.7409
EDAU10	1.5089	6.0005	4.4916
EDAZ10	1.7582	6.0005	4.2423
EDAH11	2.0075	6.0005	3.9930
EDAM11	2.2569	6.0005	3.7436
EDAU11	2.5254	6.0005	3.4751
EDAZ11	2.7747	6.0005	3.2258

The farther away from 0 the spread duration is the riskier the trade.



	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.07	0.343	2y-EDAH09	-17
EDAM09	1.15	0.423	2y-EDAM09	-28
EDAU09	1.22	0.493	2y-EDAU09	-46
EDAZ09	1.39	0.658	2y-EDAZ09	-64
EDAH10	1.46	0.733	2y-EDAH10	-84
EDAM10	1.64	0.908	2y-EDAM10	-92
EDAU10	1.82	1.093	2y-EDAU10	-92
EDAZ10	2.04	1.313	2y-EDAZ10	-86
EDAH11	2.22	1.493	2y-EDAH11	-78
EDAM11	2.45	1.718	2y-EDAM11	-74
EDAU11	2.66	1.928	2y-EDAU11	-67
EDAZ11	2.87	2.138	2y-EDAZ11	-59

Price = Outright Decimal Price - Euro Contract Price

Yield = ABS (Proxy Yield - Implied Euro Contract yield)

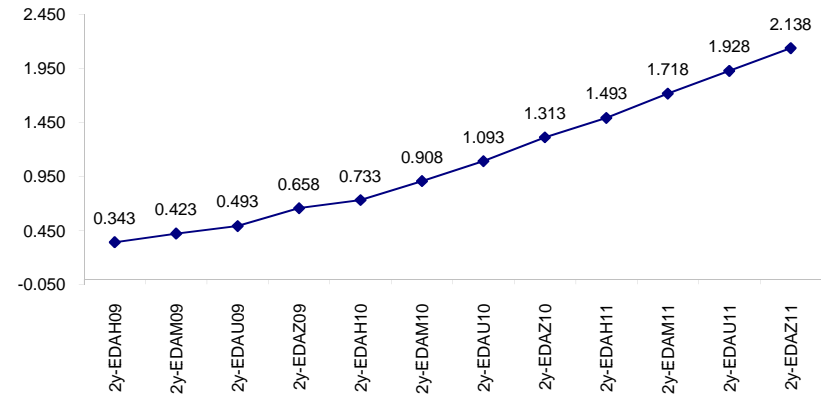
*Correlation = ED Correlation to Treasury Future over 10 days.

ED Duration as

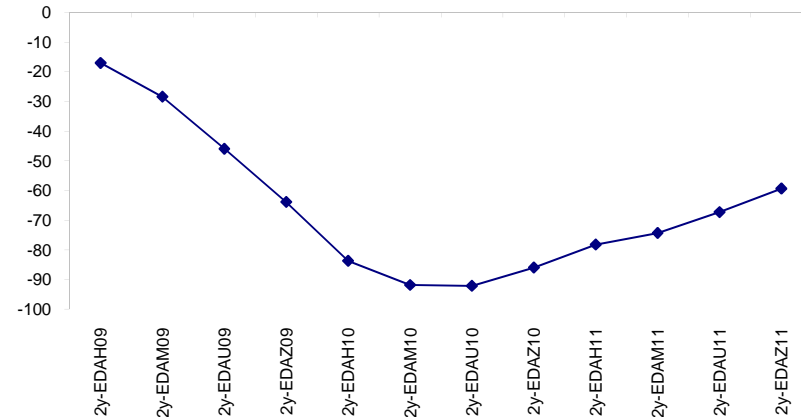
	Fraction of year	2Y Duration	Spread Duration	
EDAH09	0.0130	1.9445	1.9315	2y-EDAH09
EDAM09	0.2623	1.9445	1.6822	2y-EDAM09
EDAU09	0.5117	1.9445	1.4328	2y-EDAU09
EDAZ09	0.7610	1.9445	1.1835	2y-EDAZ09
EDAH10	1.0103	1.9445	0.9342	2y-EDAH10
EDAM10	1.2596	1.9445	0.6849	2y-EDAM10
EDAU10	1.5089	1.9445	0.4356	2y-EDAU10
EDAZ10	1.7582	1.9445	0.1863	2y-EDAZ10
EDAH11	2.0075	1.9445	-0.0630	2y-EDAH11
EDAM11	2.2569	1.9445	-0.3124	2y-EDAM11
EDAU11	2.5254	1.9445	-0.5809	2y-EDAU11
EDAZ11	2.7747	1.9445	-0.8302	2y-EDAZ11

The farther away from 0 the spread duration is the riskier the trade.

ZT Yield - ED Yield



Correlation

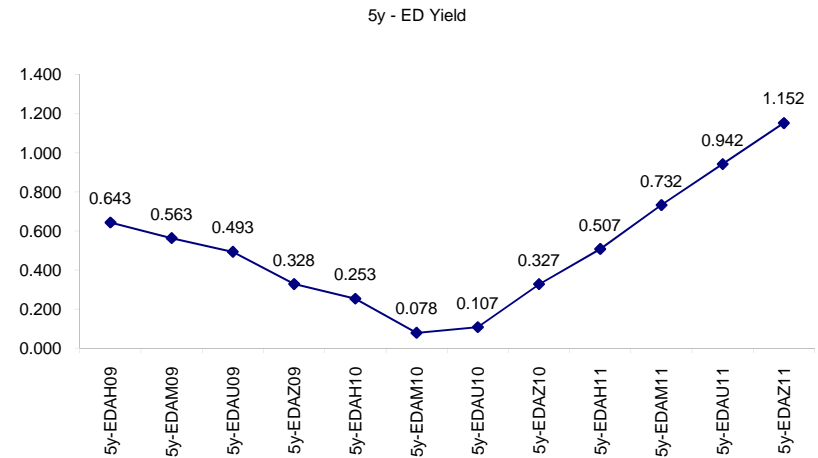


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	0.77	0.643	5y-EDAH09	2
EDAM09	0.85	0.563	5y-EDAM09	-11
EDAU09	0.92	0.493	5y-EDAU09	-31
EDAZ09	1.08	0.328	5y-EDAZ09	-51
EDAH10	1.16	0.253	5y-EDAH10	-76
EDAM10	1.33	0.078	5y-EDAM10	-89
EDAU10	1.52	0.107	5y-EDAU10	-95
EDAZ10	1.74	0.327	5y-EDAZ10	-93
EDAH11	1.92	0.507	5y-EDAH11	-90
EDAM11	2.14	0.732	5y-EDAM11	-88
EDAU11	2.35	0.942	5y-EDAU11	-85
EDAZ11	2.56	1.152	5y-EDAZ11	-79

Price = Outright Decimal Price - Euro Contract Price

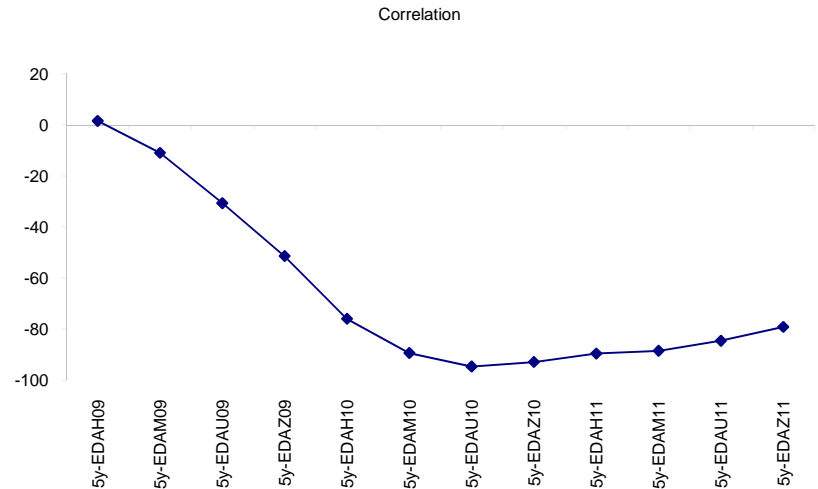
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		5Y Duration	Spread Duration	
EDAH09	0.0130	4.7157	4.7026	5y-EDAH09	
EDAM09	0.2623	4.7157	4.4533	5y-EDAM09	
EDAU09	0.5117	4.7157	4.2040	5y-EDAU09	
EDAZ09	0.7610	4.7157	3.9547	5y-EDAZ09	
EDAH10	1.0103	4.7157	3.7054	5y-EDAH10	
EDAM10	1.2596	4.7157	3.4561	5y-EDAM10	
EDAU10	1.5089	4.7157	3.2067	5y-EDAU10	
EDAZ10	1.7582	4.7157	2.9574	5y-EDAZ10	
EDAH11	2.0075	4.7157	2.7081	5y-EDAH11	
EDAM11	2.2569	4.7157	2.4588	5y-EDAM11	
EDAU11	2.5254	4.7157	2.1903	5y-EDAU11	
EDAZ11	2.7747	4.7157	1.9410	5y-EDAZ11	

The farther away from 0 the spread duration is the riskier the trade.

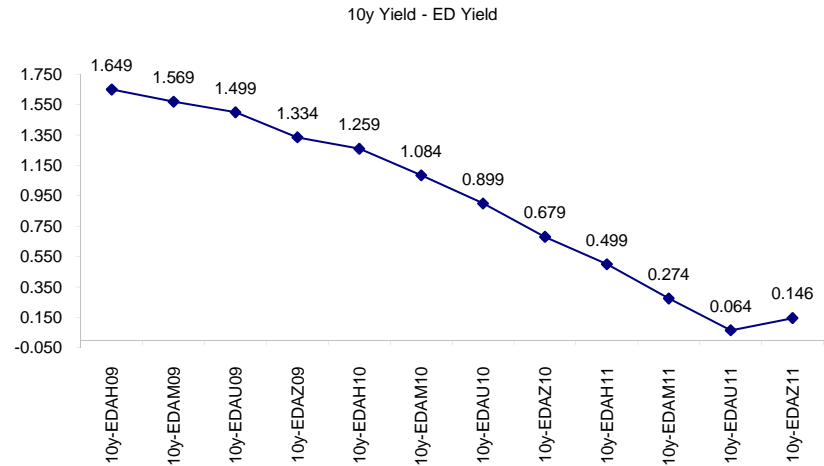


10y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	0.77	1.649	10y-EDAH09	13
EDAM09	0.85	1.569	10y-EDAM09	0
EDAU09	0.92	1.499	10y-EDAU09	-20
EDAZ09	1.08	1.334	10y-EDAZ09	-40
EDAH10	1.16	1.259	10y-EDAH10	-64
EDAM10	1.33	1.084	10y-EDAM10	-79
EDAU10	1.52	0.899	10y-EDAU10	-84
EDAZ10	1.74	0.679	10y-EDAZ10	-85
EDAH11	1.92	0.499	10y-EDAH11	-85
EDAM11	2.14	0.274	10y-EDAM11	-87
EDAU11	2.35	0.064	10y-EDAU11	-87
EDAZ11	2.56	0.146	10y-EDAZ11	-86

Price = Outright Decimal Price - Euro Contract Price

Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				10Y Duration	Spread Duration	
EDAH09	0.0130	8.5960	8.5829	10y-EDAH09		
EDAM09	0.2623	8.5960	8.3336	10y-EDAM09		
EDAU09	0.5117	8.5960	8.0843	10y-EDAU09		
EDAZ09	0.7610	8.5960	7.8350	10y-EDAZ09		
EDAH10	1.0103	8.5960	7.5857	10y-EDAH10		
EDAM10	1.2596	8.5960	7.3364	10y-EDAM10		
EDAU10	1.5089	8.5960	7.0871	10y-EDAU10		
EDAZ10	1.7582	8.5960	6.8377	10y-EDAZ10		
EDAH11	2.0075	8.5960	6.5884	10y-EDAH11		
EDAM11	2.2569	8.5960	6.3391	10y-EDAM11		
EDAU11	2.5254	8.5960	6.0706	10y-EDAU11		
EDAZ11	2.7747	8.5960	5.8213	10y-EDAZ11		

The farther away from 0 the spread duration is the riskier the trade.

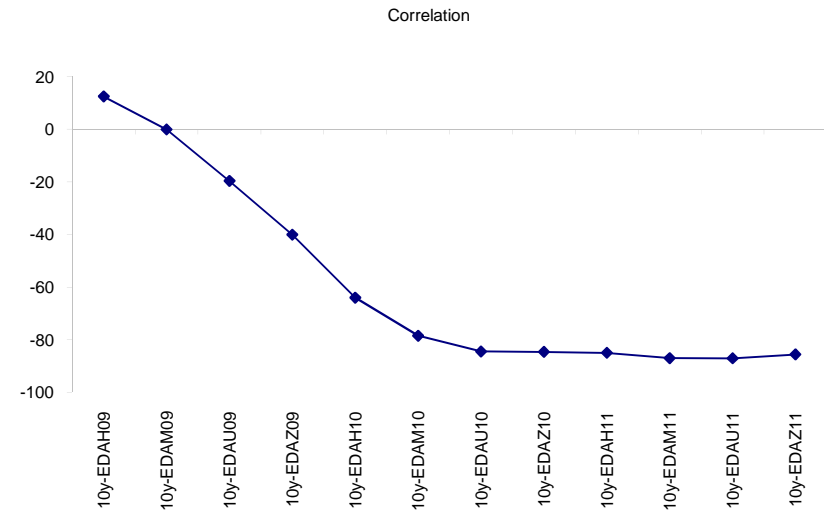


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

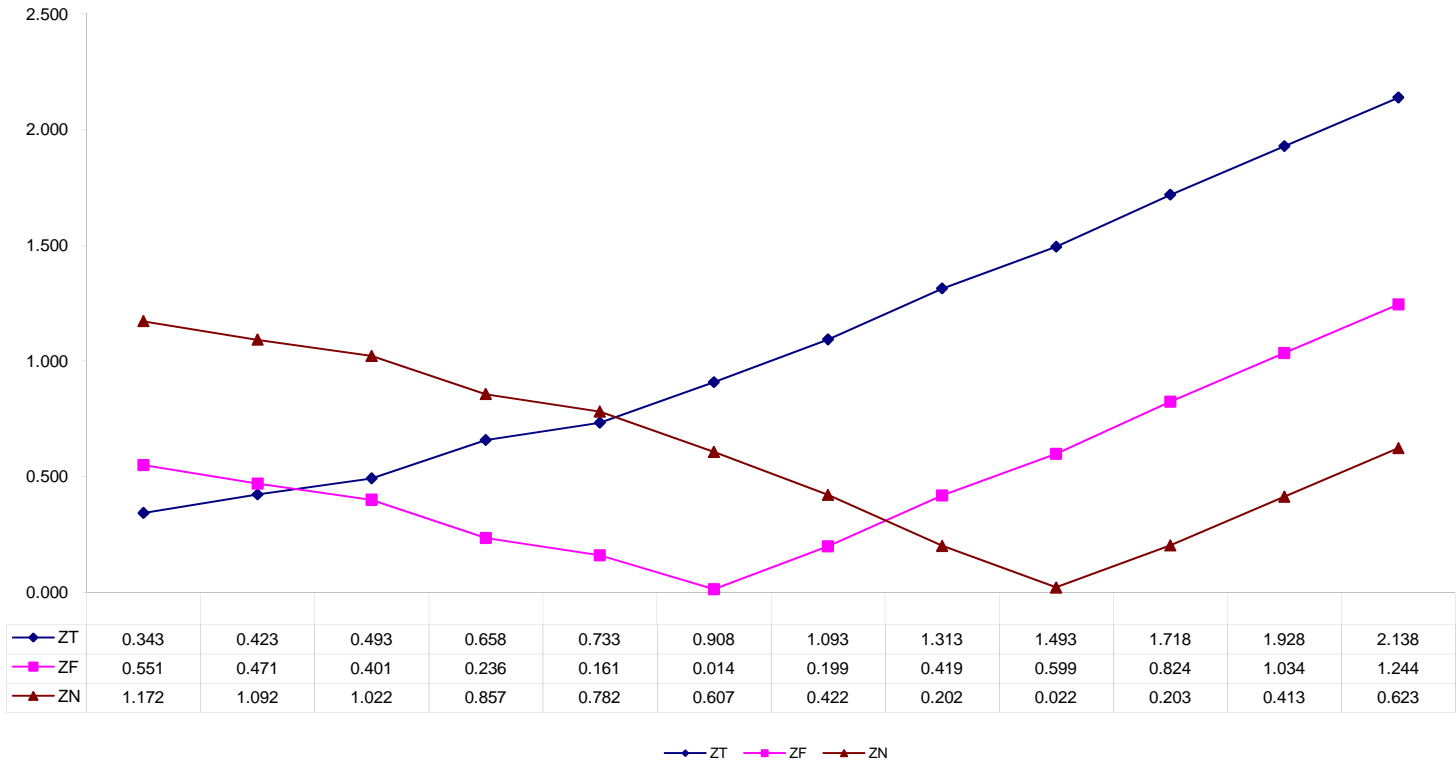
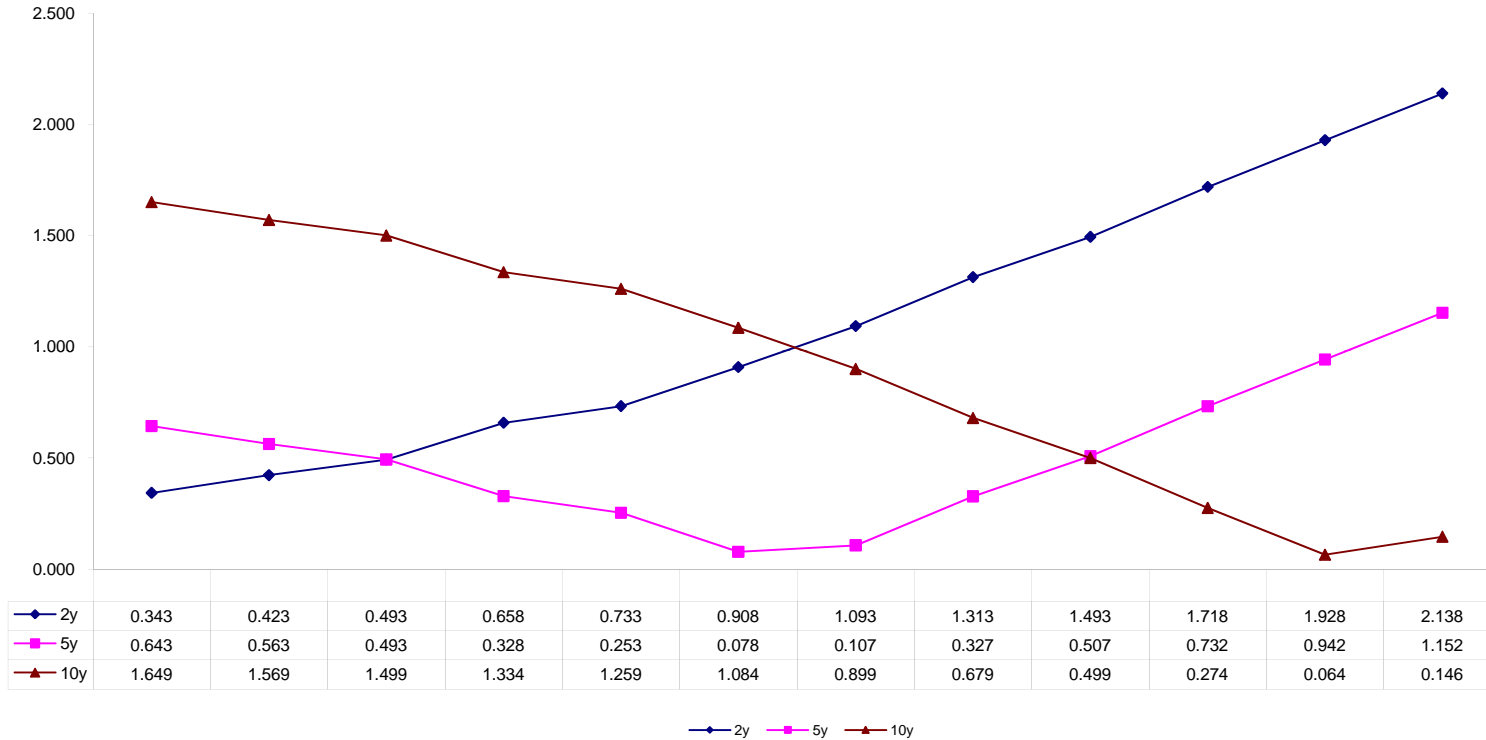
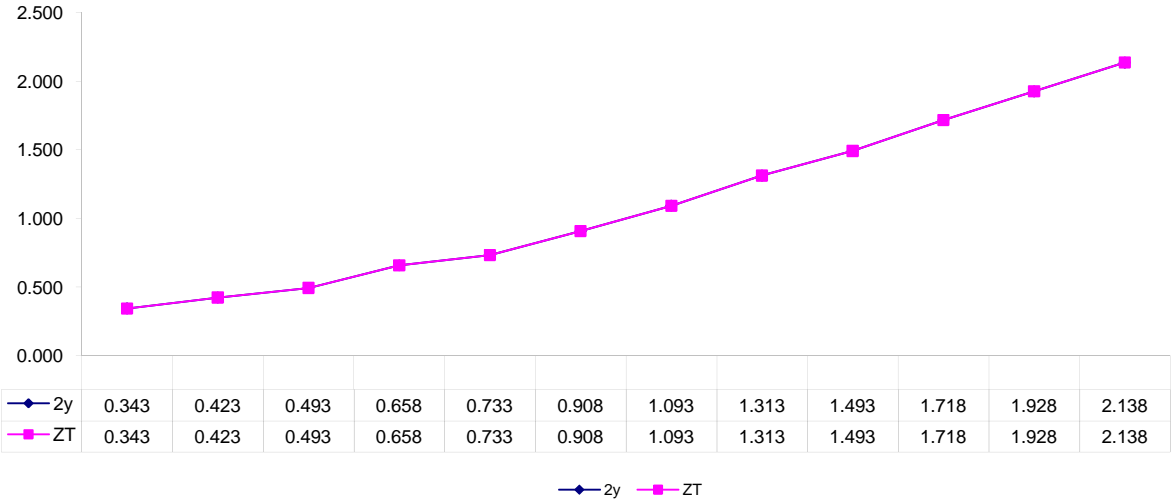
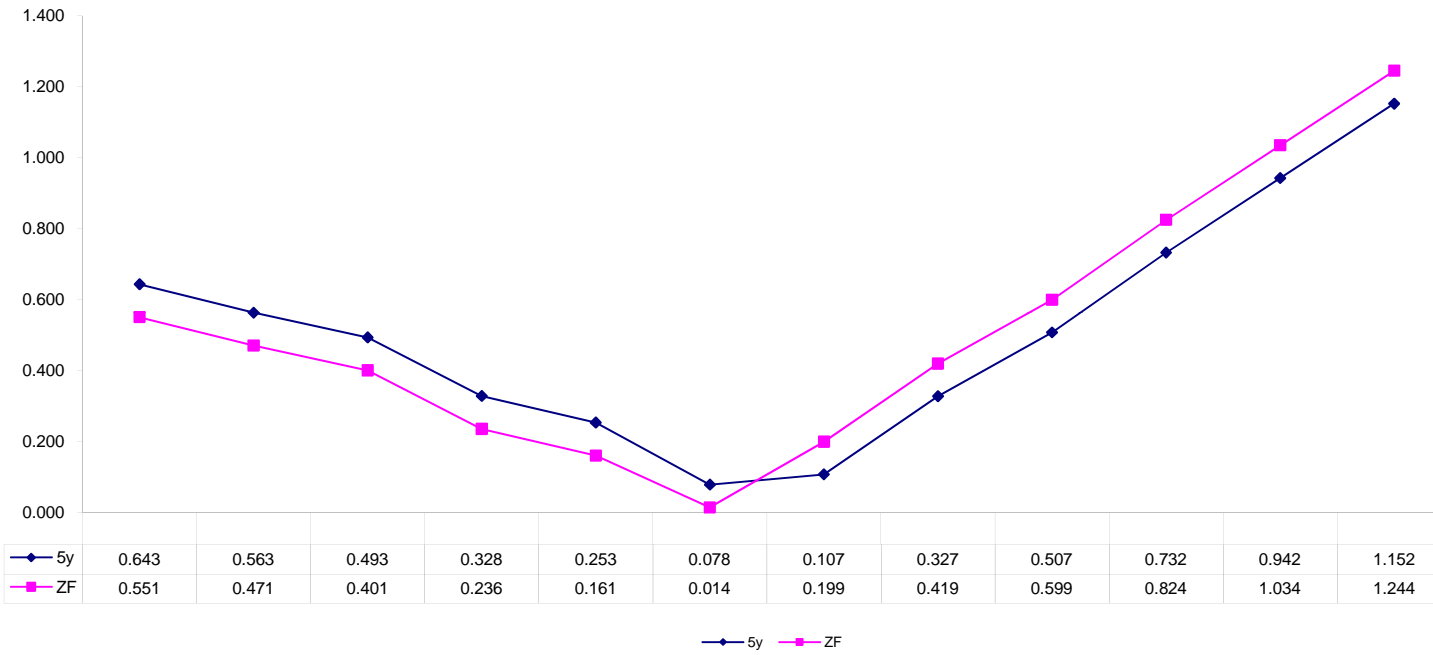


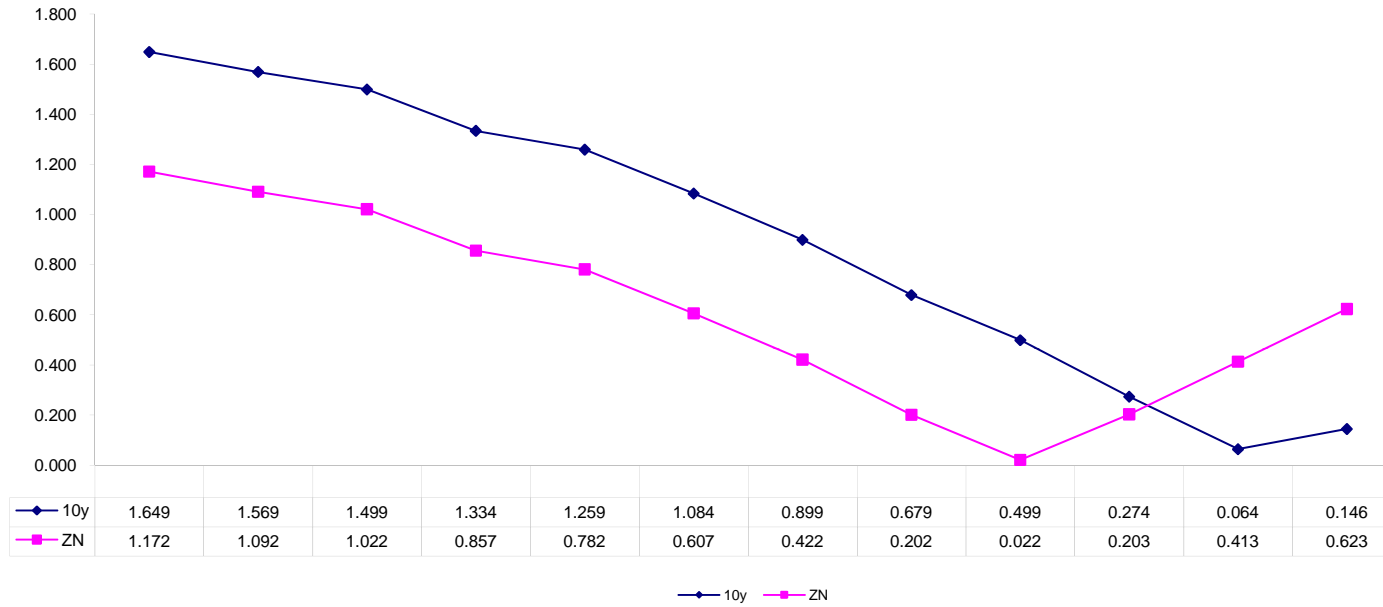
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	1.5176542	2.9375	9850.875
Red Pack	2.0624111	0.875	9797.625
Green Pack	2.891185	-1.25	9716.875
Blue Pack	3.5116206	-2.75	9656.625
Gold Pack	3.8380389	-1.5	9625

